# SUMMARY

This project is intended to cover work in Tucson related primarily to the Technical Improvement Program (TIP) at Columbia Falls. The major areas of involvement are cell magnetics modifications and LiF electrolyte additives.

### PROGRAM OBJECTIVES

In conjunction with Columbia Falls staff,

- o Improve current efficiency in the range of 0.5 1.5% with corresponding reduction in energy consumption.
- o Reduce metal pad inventory.

### 1983 SPECIFIC OBJECTIVES

- Fund electromagnetic modifications for 3 cells.
- o Evaluate results of 5-cell test.
- O Determine electrolyte properties for lithium fluoride modified bath.

## PROGRESS TO DATE

- o Reports covering techno-economic evaluation of LiF usage in both the Columbia Falls and Sebree context were issued.
- O A study was completed on the effect of LiF and ratio on liquidus temperature, conductivity and alumina solubility.

### **KEY ISSUES**

- o Resource limitations.
- o Definition of specific work requirements.

### FINANCIAL STATUS

1983 Budget Allocation

35M

Prior Spending 1984 Project Requirements